

CLAIMS

What is claimed is:

1. An intake module assembly for a vehicle engine comprising:
an air path extending from an air filter to an engine cylinder head;
a first shell forming a first portion of said air path;
a second shell forming a second portion of said air path; and
a throttle hose portion supported on at least one of said first or second shells forming a third portion of said air path wherein said first and second shells are joined together such that said first, second, and third portions together completely form said air path.
2. The assembly of claim 1 wherein said first and second shells are welded together.
3. The assembly of claim 1 wherein said first and second shells solely form said air path.
4. The assembly of claim 1 including an intake manifold integrally and solely formed as part of said first and second shells.
5. The assembly of claim 4 including at least one resonator integrally and solely formed as part of said first and second shells.
6. The assembly of claim 5 including an air filter support integrally and solely formed as part of said first and second shells.

7. The assembly of claim 6 including a throttle hose integrally and solely formed as part of said first and second shells.
8. The assembly of claim 7 including a throttle body portion integrally formed as part of said first and second shells.
9. The assembly of claim 1 including a throttle body attached to at least one of said first and second shells.
10. The assembly of claim 1 wherein one of said first or second shells includes a rigid flange defining a mounting interface for attachment to the engine cylinder head.
11. The assembly of claim 1 wherein one of said first or second shells includes a first zip tube portion including an exhaust gas re-circulation port and said other of said first or second shells includes a second zip tube portion that aligns with said first zip tube portion at a zip tube joint to form a zip tube.
12. The assembly of claim 11 wherein said first and second zip tube portions each include a transversely extending flange formed at said zip tube joint to increase tube rigidity.
13. The assembly of claim 1 wherein said throttle hose portion is integrally formed as part of at least one of said first or second shells.

14. A method for forming an intake module assembly comprising the steps of:
aligning a first shell with a second shell to form a complete air path from an air filter to an engine cylinder head; and
joining the first and second shells together.
15. The method of claim 14 including the step of forming a throttle hose on at least one of the first or second shells to form a portion for the air path.
16. The method of claim 14 including the step of integrally forming an intake manifold as part of the first and second shells.
17. The method of claim 14 including the step of integrally forming at least one resonator as part of the first and second shells.
18. The method of claim 14 including the step of integrally forming an air filter support as part of the first and second shells.
19. The method claim 14 including the step of integrally forming a throttle body portion as part of the first and second shells.
20. The method of claim 14 including the step of separately attaching a throttle body to at least one of the first and second shells.